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ABSTRACT

A discussion of appropriate ways of preparing students to take standardized tests is presented for school administrators. The point at which preparation practices move beyond the ethical depends on the inferences one wishes to draw from test scores. Inferences drawn from test scores are general in nature and will be inaccurate if instruction is limited to the actual objectives sampled in the test or, worse yet, to the actual questions on the test. Appropriate activities include teaching students general test-taking skills that would help students answer questions correctly if they have mastered the objectives. These skills are relatively easy to teach and should not take much instructional time. (SLD)

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Preparing students to take standardized achievement tests

U.S. DEPARTMENT OF EDUCATION

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As a school administrator, you know that the public often favors accountability in education and believes that holding teachers responsible for students' achievement will result in better education. Many people assume that the best data about students' levels of achievement come from standardized achievement tests. Although scores from these tests are undoubtedly useful for accountability purposes, educators recognize that such data have some limitations.

Teaching to the test

One major concern about standardized achievement tests is that when test scores are used to make important decisions, teachers may teach to the test too directly. Although teaching to the test is not a new concern, today's greater emphasis on teacher accountability can make this practice more likely to occur.

Depending on how it is done, teaching to the test can be either productive or counterproductive. Therefore, you need to carefully consider how you prepare students to take standardized achievement tests.

At some point, legitimate teaching to the test can cross an ill-defined line and become inappropriate teaching of the test (Shepard and Kreitzer, 1987). Educators may disagree about what specific activities are inappropriate. However, it may be useful to describe a continuum and to identify several points located along it.

Seven points on the continuum

Mehrens and Kaminski (1989) suggest the following descriptive points:

1. giving general instruction on district objectives without referring to the objectives that the standardized tests measure;
2. teaching test-taking skills;
3. providing instruction on objectives where objectives may have been determined by looking at the objectives that a **variety** of standardized tests measure (The objectives taught may or may not contain objectives on teaching test-taking skills.);
4. providing instruction based on objectives (skills and subskills) that specifically match those on the standardized test to be administered;
5. providing instruction on specifically matched objectives (skills and subskills) where the practice or instruction follows the same format as the test questions;
6. providing practice or instruction on a published parallel form of the same test; and
7. providing practice or instruction on the test itself.

Mehrens and Kaminski suggest that:

- Point 1 is always ethical and Points 6 and 7 are never ethical.
- Point 2 is typically considered ethical.

Thus, the point at which you cross over from a legitimate to an illegitimate practice on the continuum is somewhere between Points 3 and 5. The location of the point changes depending on the inferences you want to make from the test scores.

What you can infer from test scores

> *The only reasonable, direct inference you can make from a test score is the degree to which a student knows the content that the test samples. Any inference about why the student knows that content to that degree. . . is clearly a weaker inference. . .* (Mehrens, 1984, p. 10).

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Teaching to the test alters what you can interpret from test scores because it involves teaching specific content. Therefore, it also weakens the direct inference that can be reasonably drawn about students' knowledge. Rarely would you want to limit your inference about knowledge to the specific questions asked in a specific format. Generally, you want to make inferences about a broader domain of skills.

Further complicating matters, many people wish to use test scores to draw **indirect** inferences about why students score the way they do. Indirect inferences can lead to weaker and possibly incorrect interpretations about school programs.

Indirect inferences cannot possibly be accurate unless the direct **inference of student achievement is made to the correct domain.** Rarely does one wish to limit the inference about knowledge to the specific questions in a test or even the specific objectives tested. For example, if parents want to infer how well their children will do in another school next year, they need to make inferences about the broader domain and not about the specific objectives that are tested on a particular standardized test. For that inference to be accurate, the instruction must not be limited to the narrow set of objectives of a given test. Thus, for the most typical inferences, the line demarking legitimate and illegitimate teaching of the test must be drawn between Points 3 and 4.

While in my view it is inappropriate to prepare students by focusing on the sample of objectives that happen to be tested, you can undertake appropriate activities to prepare students to take standardized tests.

Appropriate activities to prepare students

Ligon and Jones suggest that an appropriate activity for preparing students for standardized testing is:

> *one which contributes to students' performing on the test near their true achievement levels, and one which contributes more to their scores than would an equal amount of regular classroom instruction* (1982, p. 1).

Matter suggests that:

> *Ideally, test preparation activities should not be additional activities imposed upon teachers. Rather, they should be incorporated into the regular, ongoing instructional activities whenever possible.* (1986, p. 10)

If you follow the suggestion by Ligon and Jones, you might spend some time teaching students general test-taking skills. These skills would help students answer questions correctly if they have mastered the objectives. Without some level of test-taking skills, even knowledgeable students could miss an item (or a set of items) because they did not understand the mechanics of taking a test.

Summary

Although the temptation exists to teach too closely to the test, teachers should not be pressured to do so. In fact, you should try to ensure that they do not do so.

The inferences you typically wish to draw from test scores are general in nature and will be inaccurate if you limit instruction to the actual objectives sampled in the test or, worse yet, to the actual questions on the test. However, it is appropriate to spend some instructional time teaching test-taking skills. Such skills are relatively easy to teach and should take up very little instructional time.

References

Ligon, G. D. and Jones, P. (April l, 1982). *Preparing Students for Standardized Testing: One District's Perspective*. Paper presented at the annual meeting of the American Educational Research Association, New York.

Matter, M. K. (1986). "Legitimate Ways to Prepare Students for Testing: Being Up Front to Protect Your Behind." In J. Hall and F. Wolmut (eds.). *National Association of Test Directors 1986 Symposia*. (pp. 10-11). Oklahoma City, OK: Oklahoma City Public Schools.

Mehrens, W. A. (1984). "National Tests and Local Curriculum: Match or Mismatch?" *Educational Measurement: Issues and Practice*, 3, (3), 9-15.

Mehrens, W. A. and Kaminski, J. (1989). "Methods for Improving Standardized Test Scores: Fruitful, Fruitless or Fraudulent?" *Educational Measurement: Issues and Practices*, 8 (1), 14-22.

Shepard, L. A. and Kreitzer, A. E. (1987). "The Texas Teacher Test." *Educational Researcher*, 16(6), pp. 22-31.

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